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Lecture By= Akash Handa

Subject ⇒ React Introduction

IN PREVIOUS LECTURE (QUICK RECAP) Date-7/12/2020	In Today's Lecture (Overview)
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Passing Functions to Components

How do I pass an event handler (like onClick) to a component?

Pass event handlers and other functions as props to child components:

```
<button onClick={this.handleClick}>
```

If you need to have access to the parent component in the handler, you also need to bind the function to the component instance (see below).

How do I bind a function to a component instance?

There are several ways to make sure functions have access to component attributes like `this.props` and `this.state`, depending on which syntax and build steps you are using.

Bind in Constructor (ES2015)

```
class Foo extends Component {
  constructor() {
    super();
    this.handleClick = this.handleClick.bind(this);
  }
  handleClick() {
    .log('Click happened');
  }
  render() {
    return <button onClick={this.handleClick}>      </button>;
  }
}
```

Arrow Function in Render

```
class Foo extends Component {
  handleClick() {
    .log('Click happened');
  }
  render() {
    return <button onClick={() => this.handleClick()}>      </button>;
  }
}
```

Why is binding necessary at all?

In JavaScript, these two code snippets are not equivalent:

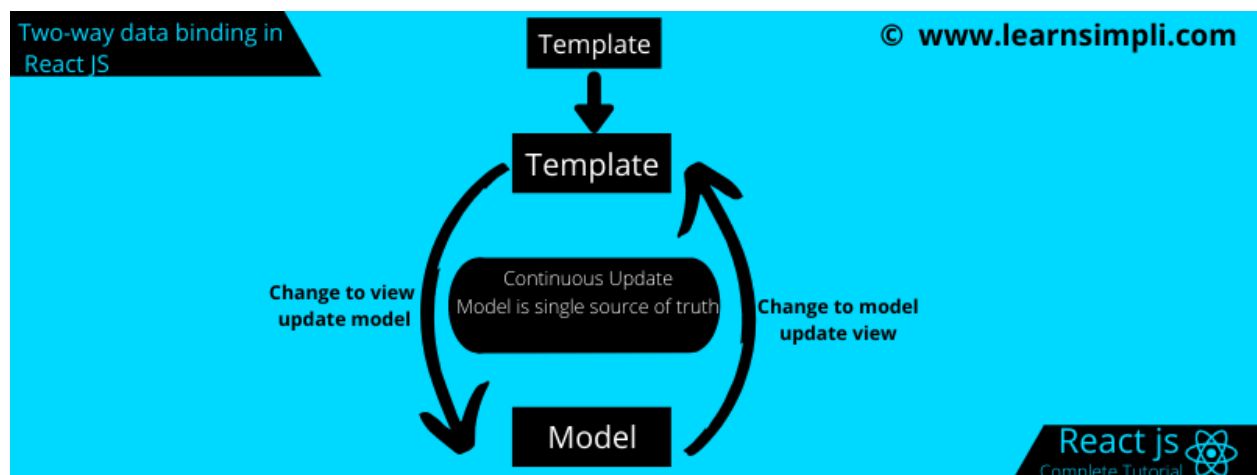
```
obj.method();
```

```
var method = obj.method;
```

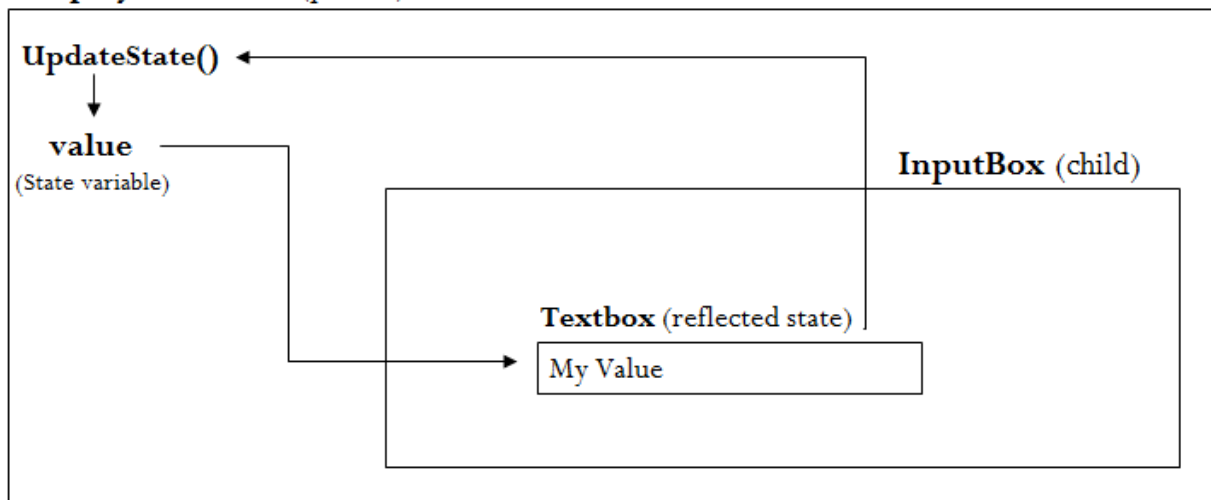
```
method();
```

Binding methods helps ensure that the second snippet works the same way as the first one.

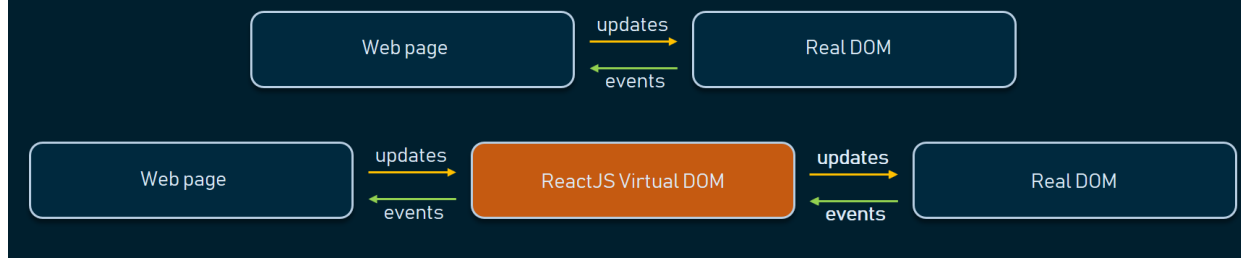
With React, typically you only need to bind the methods you *pass* to other components. For example, `<button onClick={this.handleClick}>` passes `this.handleClick` so you want to bind it. However, it is unnecessary to bind the `render` method or the lifecycle methods: we don't pass them to other components.



DisplayContainer (parent)



REAL and VIRTUAL DOMs



A simple Example

```
1 class Button extends Component {
2   constructor(props) {
3     super(props);
4     this.state = { clicked: false };
5     this.handleClick = this.handleClick.bind(this);
6   }
7   handleClick() {
8     this.props.setState({ clicked: true });
9   }
10  render() {
11    return <button onClick={this.handleClick}>Click Me!</button>;
12  }
13 }
```